METHOD AND APPARATUS FOR GENERATING PROGRESSIVE QUERIES AND MODELS FOR DECISION SUPPORT

Abstract of the Disclosure

The invention provides a next generation decision support system that includes highly adaptive sensors, transport, and models to enable time critical decision making. The decision support model of the system is progressive so that not all input parameters need to be available to produce model prediction output. Input parameters of the model with the largest first order derivative values are given highest priority in data acquisition and transmission. The parameters acquired at the sensors are stored in progressive data representation formats, which later on are progressively transmitted to the decision support server. Progressive data representation, progressive transmission, and progressive model are thus three key elements that need to be integrated together. The present invention presents a method and an apparatus that form an optimized process including the three elements subject to the decision making utility function.